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BARRIERS TO UPWARD COMMUNICATION
IN THE U. S. NAVY.

JEAN L. CHAPMAN

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BARRIERS TO UPWARD COMMUNICATION
IN THE U. S. NAVY

* * * * *

JEAN L. CHAPMAN

BARRIERS TO UPWARD COMMUNICATION
IN THE U. S. NAVY

by

Jean L. Chapman

Lieutenant Commander, United States Navy

Submitted in partial fulfillment of
the requirements for the degree of
MASTER OF SCIENCE

IN

MANAGEMENT

United States Naval Postgraduate School
Monterey, California

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BARRIERS TO UPWARD COMMUNICATION

IN THE U. S. NAVY

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Jean L. Chapman

This work is accepted as fulfilling
the research paper requirements for the degree of

MASTER OF SCIENCE

in

MANAGEMENT

from the

United States Naval Postgraduate School

ABSTRACT

Interpersonal communication is a two-way process; upward as well as downward. In any communication network, potential barriers exist which would deter and inhibit the free flow of information through the network. The Navy, as a typical bureaucratic structure, has officially designated channels of communication within its organization. Whether these channels are adequate for upward communication (from subordinate to superior) is the problem explored in this study. In this paper, the inter-related theories concerning the field of communication are discussed; among them, cybernetics and information theory. Scholarly studies of psychologists and sociologists are examined, relating them to a Navy situation. Parallels from the formal studies to the military situation were sought in an effort to find ways of determining and eliminating barriers to upward communication in the Navy. The study indicates that interpersonal skills are essential to the military leader seeking a cohesive and cooperative unit under his command.

TABLE OF CONTENTS

Chapter	Title	Page
I	STATEMENT OF THE PROBLEM	1
	The Problem	1
	Statement of the Problem	1
	Importance of the Study	2
	Research Significance	3
	Theoretical Background	3
	Information Theory	4
	Cybernetics	7
	Language and Semantics	9
	Organizational Theory	11
	The Classical School.	11
	The Naturalistic School.	12
	The systems concept	12
	Summary	13
II.	REVIEW OF SELECTED STUDIES	15
	Organizational Studies	16
	Communication Networks	18
	Hierarchical Concepts.	19
	Behavioral Studies	22
	Summary	26
III.	THE STUDY	27
	Hierarchical Aspects of the Navy	27
	Bureaucratic Structure	27
	Seniority	27
	Standardization	28

TABLE OF CONTENTS

Chapter	Title	Page
	Specialization	29
	Interpersonal Skills	30
	Interpersonal Communication in the Navy . .	31
	Upward Communication	34
	Barriers to Upward Communication	38
	Organizational Barriers	39
	Military restraint	39
	Power and status relationships	40
	Mechanical	42
	Interpersonal barriers	43
	Evaluation tendencies	43
	Perception	44
	Interpersonal trust	45
	Listener's attitude	45
	Poor listening habits	46
	Cultural and language barriers	47
	Elimination of Barriers and Stimulation of	
	Upward Communication	48
	Summary	50
IV.	SUMMARY AND CONCLUSIONS	51
	Summary of the Study	51
	Recommendations for Further Research	52
	Implications for Use of the Study	53
	BIBLIOGRAPHY	55

LIST OF FIGURES

Figure	Page
1. Bavelas' communication net patterns.....	16

CHAPTER I

STATEMENT OF THE PROBLEM

One of the fundamental requirements for a healthy organization is the ability of its members to convey information, opinion, direction, guidance, admonishment, and praise to one another in an interaction of behavior known generically as communication. Communication can be in the form of oral or written words; it can be implied by a look, gesture or even the absence of such conduct. Communication can perform various functions: the administrative function in which control and direction are exercised; the information function where the purpose is to report, analyze, explain, describe or even ask a question; and the instructive function where the communication is showing or telling how to perform an action of some sort. By no means is communication pure; that is, a mixture of many functions can be found in one message, as can be seen in every day life wherein interpersonal relationships overlap.

I. THE PROBLEM

Statement of the Problem

While communication of the interpersonal type is usually thought of in terms of what management is trying to get across to employees, there is a reverse flow of information up the chain of command. This is the feedback needed by management to see the effects of policy, sense the morale of the group, and generally keep a finger on the pulse of the entire organization.

This is "upward communication". The barriers in the path of clear communication of subordinate to superior are the specific subject of the analysis of this paper. Some of the questions for which answers will be sought are: the factors and causes which constitute barriers in the upward communication process; the relevance of these barriers to problems in upward communication; what specific processes may be utilized to eliminate such barriers; and the practices which will stimulate and encourage the flow of upward communication in a given organization. With respect to military application, the study will consider problems of military hierarchy, attendant blocks to effective upward communication and will attempt to draw inference and parallel from studies in the area of organizational interpersonal communication applicable to Navy situations.

Importance of the Study

The contribution of this research to the knowledge about the communication process will be primarily one of collation; the gathering together of pertinent writings and research about communication and its allied fields of study, relating them to a military situation, and drawing conclusions based upon this application. The writer has searched through the facilities of the U. S. Naval Postgraduate School Library, as well as the library of the U. S. Army Human Resources Research Unit, Monterey, to find materials which directly applied the effect of the military hierarchy structure on interpersonal communication within it. The Bureau of Naval

Personnel and the Naval Personnel Research Activities in Washington and San Diego were also contacted for this information. So far as is known at these activities, no studies are on file having to do with causes or answers to the interpersonal communication problem in the Navy.

Research Significance

Too often military personnel, and especially career officers, consider themselves apart from the rest of society in many ways. We often hear the expression, "the right way, the wrong way and the Navy way". By so thinking, the value of behavioral research may be largely ignored as pertaining to "others". One of the aims of this study is an attempt to apply basic principles of research to a strictly military situation and draw therefrom subsequent conclusions, hoping to point officer thinking in these directions. Our society becomes more and more interdependent as science and technology develop; the image of the military officer as a "spit-and-polish robot" cannot long endure under such pressures. In order to join society, the military organization must contribute to society's concept of itself by participation and stronger identification. As a step in this process, isolation from such basic organizational concepts as the human communication process is explored and analyzed in this study.

II. THEORETICAL BACKGROUND

Interpersonal communication is one facet of an extremely

diverse field of science involving many disciplines. Broadly defined, "communication" would include any means which links one mechanism or organism with another. Within this frame of reference can come such strange companions as music, art, speech, computers, telephones, newspapers, or even a guided missile. Because of its diversities, the simple word "communication" is no longer amenable to specific, concrete concepts in every field of interest; it can only be used as a generic term. Some of the theories which have sprung up about this word and its applications will be defined and briefly discussed in this study. This will acquaint the reader with the breadth of content which serves as background and foundation for the study of interpersonal, or social (as it is sometimes called) communication. The fields of interest presented here are by no means a complete roster, but they are those which seem to bear most directly on and have influenced most the subject of primary consideration for this research.

Information Theory

Information theory (or as some writers use in a synonymous way, communication theory) is largely the brain-child of two mathematicians, Norbert Wiener and Claude Shannon. Although their efforts were independent of one another, they arrived at basically the same conclusions. To a large extent, they were indebted to the earlier work of R. A. Fisher, a British statistician, through whom the word "information" became a technical term. He measured how much a sample, or

a statistic based on that sample, contributed to his overall decision; this measure was a quantitative amount of (Cherry, 1957) "information".

Information theory as a mathematical theory of communication, is based primarily on the probabilities with which certain messages will be transmitted through communication channels from the source to the receiver. The sample space is the extent, or range of all possible messages which might be transmitted. The theory deals with a system in which an "information" source" (device or person which produces messages to be transmitted) emits signals through the "channel" over which these messages are transmitted to the receiving point. Statistical inference enters the picture since the system has potential for error; it is probable that the message which originated at the source will not be exactly that which arrives at the receiver. There are, at best, minor disturbances which cause inexact or inefficient transmission or reception. These are called "noise". At the end of our communication system is a translation, or decoding, device which infers, from the message received, and in spite of the noise encountered in the system, what the original message probably was. Since the disturbances causing irregularity or "garbling" in the message are random, this becomes a problem for statistical inference, or one involving probabilities. Redundancy is a property of languages, codes and sign systems which arises from using different combinations to transmit

the same idea, and which facilitates communication in spite of all the factors of uncertainty acting against it. Thus, redundancy becomes a protective device against noise in a communication system, thereby increasing the probabilities of an original message arriving in its form. Thus, communication theory deals with both the number of messages transmitted and how accurately these messages are received.

The relation of information theory to this study is basic. Interpersonal communication is a system, also; it is convenient to use information theory terms when referring to this system. For example, our system has its "source" in the communicator, or person transmitting a message through a "channel" (air or piece of paper) to another person or group of persons which become the "receivers" and consequent decoders of the message. "Noise" also enters the interpersonal communication system in the form of semantic difficulties between the sender and receiver, or inattention, or a host of other barriers to efficient communication. Our system's protection against the effects of noise is also a form of redundancy. For example, the sentence "All superfluous illumination shall be extinguished" might produce noise in some communication systems; therefore, a form of redundancy would be to repeat the message in other code form, such as "All unnecessary light shall be turned off". This study will show other forms of noise and redundancy in inter-personal communications systems, and also make reference to research projects which have used the discipline of statistical inference when

deriving workable theses concerning these variables.

Cybernetics

"Cybernetics is the science of communication and control."
(Beer, 1959) Norbert Wiener originated the name from the Greek word for pilot or helmsman, and he defines it as "a study of messages which control action". Basically, this relatively new science is concerned with adapting the principal functions of the human brain to the operation of complex machines, such as the computer. The most effective mechanism known for compilation and processing of information and the use of that information is the human brain. Cyberneticians attempt to relate the human nervous system to the electrical-mechanical system of a machine which will be able to function in much the same way. Cybernetics has to do with the communication between man and machine and between machine and machine. Fundamental to this science's principles is the concept of "feedback" or a control process which indicates to the man or machine the quality and effect of performance. Feedback acts as a controlling mechanism in the same sense that homeostasis operates in the human body. For instance, the sense of balance in the human being is controlled by the inner ear's equilibrium function. The nerve impulses to this control center establish whether the individual is or is not in equilibrium. This feedback stimulates muscle reaction which corrects for any disequilibrium, again sending a signal to the inner ear and so on throughout a continuous cycle which

achieves that state we call "balance". The same type of operation can be observed in the homeostatic devices designed by cyberneticians as they seek to devise ways in which a mechanical system can change state with a change of information given the system and then respond to correct any deviations which may appear in the behavior pattern established by repetition of change in state. Even today there are machines which are capable of great complexities in goal-seeking behavior, using this homeostatic concept of control through feedback, in much the same fashion as human beings. (The one barrier not crossed is the one of abstract thought; it is believed that machines will never reach man's power in this respect).

Cybernetics plays an important role in the concepts inherent in the field of interpersonal, as well as that of mechanical communication. Particularly in the area of feedback we can see an application of control in communication. The originator of a message must look at the results he actually has with his communication to find standards for measurement of new attempts to communicate. The receiver's response to a communication is the empirical standard for evaluating the originator's output. The response the receiver makes is the feedback the originator gets from his communication. (Thayer, 1961)

Feedback is germane to the idea of upward communication in organizations, for managers must be informed as to the effect of their policies, decisions and directions upon their subordinates in order for the organization to remain efficient.

Language and Semantics

Usually, when we speak of communication, we are referring to verbal communication. Verbalizing means, necessarily, the use of language, and language involves words and patterns made up of word combinations. It is usually formal and complex and suited to the culture of the group using it as a communication tool. For example, it may be that English is better adapted to experimentation with nuclear physics, but Arabic has over 6,0000 different words for camel, its parts and equipment! (Chase, 1953)

Language, or rather the use of it, serves as a stimulant to communication; however, it is both facilitative and limiting. To put it another way, the better the language, the more effective the thought; the better the grasp and control of language tools, the better the ability to conceptualize, synthesize,, analyze and so on. One's command of a language ensures his command of a more comprehensive mode of communication, and therefore makes his potential for effective communication with others better.

The International Society for General Semantics has issued a short definition of semantics: "Semantics...The systematic study of meaning." (Chase, 1953) "Meaning" here does not necessarily mean the one given in a standard dictionary; rather it has the connotation of "evaluation". Korzybski, the late Polish semanticist, likened the relation of language to reality with the relation of maps to the territory they represent. (1) a map is not the territory

(words are not the things they represent); (2) a map does not represent all of a territory (words cannot say all about anything); (3) a map is self-reflexive, in the sense that an ideal map would have to include a map of the map, which in turn would have to include a map of the map of the map, etc. (It is possible to speak words about words, words about words about words, etc.; in terms of behavior this means that it is possible to react to our reactions, react to our reactions to our reactions, etc.). Evaluative habits based on these premises, Korzybski said, result in flexibility of mind, lack of dogmatism, emotional balance and maturity. (Hayakawa, 1954)

When individuals come together to work on a problem, or even to exchange ideas, they are dependent upon language as a principal, if not exclusive, means of exchanging information, opinion and suggestions. Semanticists warn us about some of the weaknesses and distorting influences in the words we use. As a simple example of the multitudinous number of meanings for one word, the specific meaning of the word "slip" can mean,

- in common parlance:

fall on the ice
a verbal indiscretion
a woman's garment
a surreptitious exchange of currency
a small piece of paper
space for a ship
fabric cover for a pillow or furniture

- to a ceramic engineer:

an aqueous suspension of potter's clay

- to an electrical engineer:

the difference between the speed of the rotor in an induction motor and the synchronous speed.

(Gore, 1958, p. 15)

Abstractions present special trouble in communication; meanings are ill-defined and even overlapping. Too often we find emotional overtones in such words as "democracy", or "communist" and "free enterprise" and no one definition acceptable to everyone. Consideration of the pitfalls extant in everyday social communication because of semantic differences is a large factor in the entire understanding process.

Organizational Theory

Every author has a slightly different perception of the meaning and purpose of the "organization"; there are even various schools of thought on the subject of the composition and formation of organizations. There are, however, three of these schools of thought which are presented as representative of the modern perspective:

✓ The Classical School. The classical point of view holds that work or tasks can be so organized as to accomplish efficiently the objectives of the organization. An organization is viewed as a product of rational thought concerned largely with coordinating tasks through the use of legitimate authority. It is based on the fundamental and usually implicit assumption that the behavior of people is logical, rational, and within the same system of rationality as that used to formulate the organization. It is an analytical approach

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developing normative models. That is, on the basis of deduction from some assumptions it attempts to specify what an organization should be. (Litterer, 1963)

The Naturalistic School. The naturalistic or behavioral point of view has taken as its main topic of interest the behavior of people in groups or collectivities. It holds that organizations spring naturally or spontaneously from the association of people who have common or mutually supportive needs, interests, or objectives. Behavior of people in collective environments tend to have a much broader and varied set of behavior than is called for, or for that matter anticipated, in the classical point of view. (Litterer, 1963)

This would seem to be, in fact, the antithesis of the classical school; however, there is more to contend with than that.

The systems concept. There has slowly but gradually emerged yet a third view of organizations. This approach looks on an organization as a system, (or perhaps part of a system), of events, activities, and other components which must exist if any objective is to be realized at all. This point of view, in short, does not concern itself particularly with how to accomplish a specific objective. Instead, it concerns itself with identifying the basic factors and the interrelations between them necessary for any task or goal to be accomplished.

There is a general topic of organizations of which these three views are but parts. In this paper, an organization is considered to be a "social unit within which people have



achieved somewhat stable relations among themselves in order
(Litterer, 1963)
to facilitate obtaining a set of objectives or goals."

Interpersonal communication could be considered the life blood of any organization; the thread knitting the members together. An organization can be thought of as having two main types of communication: the formal, and the informal. Formal communication is that which follows the established channels of communication and generally has a downward flow. Informal communication, on the other hand, does not follow any set pattern, but forms a channel(s) of its own in the paths of least resistance. In the military situation, for example, formal communication is accomplished by the Plan-of-the-Day. This document is published in order to give the precise order and formula for each occurrence of the day to come, plus any other information which is necessary for the organization to know in advance. Informal communication in the Navy is the familiar "scuttlebutt", or gossip-centered conversations of the passageways and coffee-messes. It can also be the very powerful tool of the skillful administrator who uses it properly.

Scott (1961), mentions communication as one of the three linking activities universal to human systems of organized behavior. Deutsch(1951) points out that organizations are composed of parts which communicate with each other, receive messages from the outside world, and store information.

In each of the three major schools of thought on organi-

zation theory, interpersonal communication plays a part; how much it is acknowledged and developed depends upon the perception of the individual organization's leaders.

III. SUMMARY

Wherever there are organizations there are communication channels; whether they be formal or informal, they pose certain problems to those in the organization. How reliable the channels in each organization are depends upon a group of variables drawn from the fields of information theory, cybernetics, semantics and organization theory itself. In order to delineate the exact dimensions of the problem explored in this study, we must see the full background of its context in the other disciplines surrounding it. In other words, it is not enough simply to plunge in and diagnose the illness without first a history of the patient.

The importance of Navy administrators examining the question of upward communication hangs in the relevance of all studies concerning human behavior or organizational interactions to the Navy's own organization and concept of management. The modern Navy cannot afford to permit any relevant study to be dismissed as not applicable; it must find parallels within so that the Navy may continue to remain fruitful to its members as well as to the nation it serves.

CHAPTER II

REVIEW OF SELECTED STUDIES

The communication system in organization is often taken for granted. Yet there is abundant evidence that communication in most organizations is not operating efficiently. If we can learn what breakdowns occur and why, and what can be done about it, organizational productivity may increase. It is also possible to help people in organizations clear up misunderstandings, reduce frustrations, and enhance the satisfying of personal needs.

The area of interpersonal communication has stimulated a number of scholars to conduct research products which could serve as stepping stones to better understanding of this subject. Some of these projects have direct relevance to interpersonal communication within organizations. Others are slanted to the communicator and/or the receiver concerning characteristics they have or do not have with respect to their ability to communicate effectively.

The studies selected for review in this chapter are considered by the writer to be representative of the great number to be found in research journals. It is not practicable to include the entire range of literature on the subject of interpersonal communication; therefore the selections that have been made are in two major areas: organizational studies and behavioral studies.

THE HISTORY OF THE

REIGN OF KING CHARLES THE FIRST

IN WHICH ARE CONTAINED THE
MOST IMPORTANT AND INTERESTING
CIRCUMSTANCES OF HIS REIGN
FROM HIS MARRIAGE TO HIS DEATH
IN THE YEAR 1649
BY
JOHN BURNET
BISHOP OF SALTSMORE

LONDON
Printed by J. Streater, at the Sign of the Gun, in St. Dunstons Church-yard, in the County of Middlesex.
1724

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I. ORGANIZATIONAL STUDIES

Communication Networks

In 1950, Alex Bavelas led the way in experimental studies of the relative efficiency of task groups having different types of communication nets. Bavelas created designs of communication patterns, or nets, which impose strictly-controlled communication channels upon experimental groups. (See Figure 1.) A "circular" design permits each member to communicate with only one member immediately to his right and another immediately to his left. An "all-channels" design permits each member to communicate with every other member. A "wheel" design makes one member a coordination center, and all other members are able to communicate with only the central, coordinative member. Bavelas found that groups with wheel designs quickly develop clearly defined role structures with the coordinative member occupying the high status position in the group. (Bavelas, 1950)

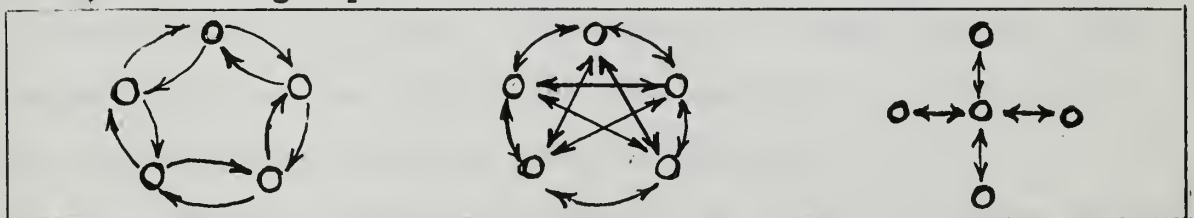


Figure 1. Bavelas' communication net patterns. Left to right: circular; all-channel; wheel

In these experiments, Bavelas was not designing literal imitations of organizational channels; nevertheless, they do approximate channels that are used in business organizations. The "wheel" design simulates a department head and four

THEORY OF THE EARTH

CHAPTER I

The Earth is a sphere, and its surface is divided into two parts, the land and the water. The land is divided into continents and islands, and the water is divided into oceans and seas. The continents are the large masses of land, and the islands are the small pieces of land. The oceans are the large bodies of water, and the seas are the smaller bodies of water. The Earth is covered by a thin layer of air, and the air is divided into layers. The lowest layer is the troposphere, and the layers above it are the stratosphere, the mesosphere, and the thermosphere. The Earth is also covered by a thin layer of water, and the water is divided into layers. The lowest layer is the hydrosphere, and the layers above it are the atmosphere, the lithosphere, and the biosphere. The Earth is a complex system, and its study is a branch of science called geology.



The Earth is a complex system, and its study is a branch of science called geology. The study of the Earth's structure and its history is a branch of science called geology. The study of the Earth's surface and its features is a branch of science called geography. The study of the Earth's atmosphere and its effects on the Earth's surface is a branch of science called meteorology. The study of the Earth's water and its effects on the Earth's surface is a branch of science called hydrology.

subordinates who report individually to him. The "circle" might apply to the communication among peers at the same level in the organization, whose most frequent communication contacts are limited to the colleagues on each side of them.

Building on the pioneer work of Bavelas, Harold Leavitt (1951) conducted further experiments with communication networks and their effect upon group performance. It was the purpose of his investigation to explore the relationship between the behavior of small groups and the patterns of communication in which the groups operated. He also considered the psychological conditions that are imposed on group members by various communication patterns, and the effects of these conditions on the organization and the behavior of its members.

Leavitt used Bavelas' designs of communication nets and ultimately found that a position of centrality is an important determinant of a member's success in achieving status in a group. He also found that the behavioral difference of accuracy, total activity, satisfaction of group members and organization of the group were attributable to differences in communication patterns. Also indicated, but not conclusively, were differences among patterns in speed of problem solving, self-correcting tendencies, and cohesiveness.

In terms of what communication net proved "best", Leavitt, using the two patterns of circle and wheel, found that the wheel-shaped group performed simple tasks best in all respects, working faster and making fewer errors than any of the other nets. The circle was the least efficient. The

organization of the wheel was almost immediate and proved stable; no stable form of organization was evident in groups formed on the pattern of the circle. (Leavitt, 1951)

These experiments were commented on by Bavelas and Barrett (1951). In their article, the parallel was drawn between the communication networks of the experiments and the complex systems which produce these networks in organizations. An organizational system of communication is usually created by explicit delegations of duties and formal systems of responsibility. Implicitly, these categories include statements of the nature, content, and direction of the communication which is considered necessary for the performance of the group. Groups tend to depart from such formal statements however, and create other channels of communication. In other words, informal organizational systems emerge.

In this function, Bavelas and Barrett contend that it is entirely possible to view an organization as an elaborate system for gathering, evaluating, recombining and disseminating information. It is not surprising, in these terms, that the effectiveness of an organization with respect to the achievement of its goals should be so closely related to its effectiveness in handling information. In an enterprise whose success hinges upon the coordination of the efforts of all its members, the managers depend completely upon the quality, the amount, and the rate at which relevant information reaches them. The rest of the organization, in turn, depends upon the efficiency with which the managers can

process this information.

This line of reasoning leads the authors of this article to the belief that communication is not a secondary or derived aspect of organization -- a "helper" of the other functions. Rather they describe it as the essence of organized activity and is the basic process out of which all other functions derive. The goals an organization selects, the methods it applies, the effectiveness with which it improves its own procedures -- all of these hinge upon the quality and availability of the information in the system.

The article goes on to point out that laboratory experiments can lead into systematic studies of actual operating organizations. As the gap between laboratory and the organizational applications becomes smaller, communications patterns will afford important insight for managers. (Bavelas and Barrett, 1951)

Hierarchical Concepts

An extension of the network concept initiated by Bavelas and Leavitt is the study of communication phenomena in experimental groups differentiated into high-status and low-status subgroups. Harold Kelley (1951) conducted one of the first of these studies. Kelley stated that the importance of research on the problem of status-differentiation lies primarily in the numerical predominance of hierarchic groups over undifferentiated ones in our culture. The purpose of the study was to determine some of the driving and restraining forces which act upon various communication content in a group by virtue of that group being structured as a

status hierarchy.

Kelley made the following conclusions based on his experimental data:

1. The more unpleasant is a position in a hierarchy, the stronger are the forces on a person to communicate task-irrelevant content,...Irrelevant content is postulated to serve the function of permitting the occupant of an undesirable position to escape from it...
2. Communication serves as substitute for real upward locomotion in the case of low-status persons who have little or no possibility of real locomotion...
3. Restraining forces act upon high-status persons against addressing criticisms of their own job to the lower sub-group and against expressing confusion with their task...
4. The existence of a hierarchy produces restraining forces against communicating criticisms of persons at the other level. Higher status seems to give persons greater freedom to express whatever criticisms they have of the other level directly to the criticized persons rather than to one's own level.

(Kelley, 1951, pp.55-56)

The results of the Kelley experiments bear direct relationship to the findings of Arthur Cohen in 1958. Cohen added the concept of power to that of status in his report and thereby arrived at a more "instrumental" view of upward communication. Cohen found that when a hierarchy is defined in terms of status, people may attempt to maximize their status in a variety of ways. They may misperceive their position, try to get psychologically closer to those of higher status, not admit to anything that will call a desirable status into question and so on. It would appear that the use

of status does not specify dependence on highs by lows. By defining rank in a hierarchy in terms of power instead of status, however, a functional dependence of lows upon highs is created. An emphasis on power difference points to the behavior of the lows toward highs in the interests of need satisfaction, and not merely to their attempts to approximate status in either fantasy or wish-fulfillment. Cohen concludes that "those with low rank for whom mobility upward is impossible have less need to communicate to upper levels in...a friendly, promotive, and task-oriented fashion." (Cohen, 1958)

William Read (1962) examined the relationship between upward mobility among executives and tested the accuracy with which they communicate problem-related information upward in industrial hierarchies. Building on Cohen's emphasis on the "instrumentality" of upward communication (which is supported by the findings of Hurwitz, Zander and Hymovitch (1953)), Read attempts to isolate variables which account for the accuracy of upward communication.

One such variable is mobility -- the mobility aspirations of lower-status members in industrial organizations. The major hypothesis of Read's study is that a negative relationship exists between upward mobility of members of industrial organizations and the accuracy with which these members communicate upward in the hierarchy. More specifically, it was predicted that the stronger the mobility aspirations of the subordinate, the less accurate would be his communication of problem-related information to his immediate superior. Read

revised his hypothesis by the degree that the relationship between mobility and accuracy in communication would be modified by two conditions. These conditions were "interpersonal trust" of the subordinate for his superior, and the subordinate's perception of the "influence" of the superior over that subordinate's career. It was predicted that the negative relationship between mobility and communication would be greater under conditions of low trust (of subordinate for superior) than under conditions of high trust. Also, it was predicted that the greater the influence the subordinate perceived in his superior (meaning the superior's position to satisfy or thwart the subordinate's aspirations), the greater would be the subordinate's tendency to withhold problem-related communication from such a superior. Read's experiment with 52 superiors and their 52 respective subordinates bore out his hypothesis, finding it to be essentially correct. He concludes that the variable of mobility remains relevant, but is modified with an influencing factor of trust. An extreme condition for barriers to upward communication in industrial hierarchies would be present when a highly mobile subordinate has limited trust in a superior he believes to be powerful or influential.
(Read, 1962)

II. BEHAVIORAL STUDIES

From the structural mode of investigation by Bavelas and Leavitt came a steady procession of experimental studies on communication as an organizational process. Gradually, the studies included not only the patterns' effects upon the

communication process, but the behavioral aspects of the persons involved in the communication network. Some researchers emphasized the latter; it is these studies which will now be reviewed.

The research conducted by Cohen and Read (see above) can be thought of as a "bridge" between the organizational studies and the behavioral studies. Their efforts were hinged on the earlier work of Bavelas and Leavitt, but introduced variables into the communication net -- the variables of influence, trust, perception and status.

James Loomis (1959) examined the establishment of a cooperative relationship based on interpersonal trust and how communication would be used to establish trust. Crucial to the establishment of mutually perceived trust is the subjective impression that the individual has of each other member of the group. The individual must feel that the other person is trustworthy, and that the other person is trusting. In other words, if the individual perceives mutual trust, he will cooperate in a corporate venture, otherwise he will not. Since the experiment involved a game in which each player was dependent on the other, it was expected that the subject would perceive trust if he was aware of his dependency. If he did not perceive trust, he would not cooperate; if he did, he would cooperate. By the method of note-passing, the players communicated their intentions to one another. By far the most striking feature of this experiment is that Loomis found perception of what was communicated to be the most important

factor. Intention of the communicator was irrelevant if it was not perceived by the receiver.

When communication is encouraged or allowed to take place in only one direction, with no opportunity for feedback from the receiver in the form of acknowledgements, questions, or negative reactions, then accuracy in communication is poor. Both sender and receiver will show low confidence in each other.
(Loomis, 1959)

Leavitt and Mueller (1951) discovered that completion of the circuit between sender and receiver (feedback) increased the accuracy with which information is transmitted. They also found that even though free feedback is limited to the early phases of the communication process, considerable improvement takes place in both accuracy of communication and confidence between the two participants. Their findings support the hypothesis that free feedback is an aid to accuracy in interpersonal communication. Free feedback seems to permit the participants to learn a mutual language, which once learned may obviate the necessity for further feedback. Additionally, the findings support the hypothesis that the presence or absence of feedback affects the sender-receiver relationship. By experimenting under conditions which reproduced only the two extremes, the researchers found that zero feedback is accompanied by low confidence and hostility; free feedback is accompanied by high confidence and amity.

Jack Lyle (1961) conducted an experiment using four-man teams in a news-story writing task. Communication structure

and group atmosphere were studied in relation to group oral communication, group morale, and productivity. He found that democratic groups tend to have a higher rate of task irrelevant communication than authoritarian groups; there was a trend for a similar relationship between group atmosphere and the rate of task-relevant communication. Democratic groups tended to work fastest when inter-member communication was restricted, authoritarian groups with open communication. However, no relationship could be established between communication structure and quality of productivity.

Lyle found that denial of opportunity for feedback was related to lowered morale in democratic groups but not in authoritarian groups. Lyle concluded that the editor (leader) striving for both a democratic atmosphere and efficiency should in some way curtail conversation among staffers (followers). Further, the important thing seems to be that he should keep open and active the channel between himself and his workers in the interest of both productivity and employee morale. If the work situation has a more authoritarian atmosphere, the editor should maintain a different communication situation. He should effect a balance; the more he talks with his workers, the more he interferes with staff efficiency, the more staff morale rises. The less he talks, the greater will be staff efficiency, but morale will suffer.

CHAPTER III

THE STUDY

I. HIERARCHICAL ASPECTS OF THE NAVY

Bureaucratic Structure

The great German sociologist, Max Weber, reviewed and explained the concept of bureaucracy in its modern sense in his work, Theory of Social and Economic Organization (1947). Weber's ideal type of bureaucracy is founded on legal authority, has a hierarchical structure, formalized rules, career personnel, and norm authority.

The U. S. Navy is an example of bureaucratic organization, with its structure following Weber's ideal with faithful accuracy. The formalistic pattern of organization in any naval activity is prescribed by regulation. Its organization chart shows a continuous series of official functions bound by rules. Each position (or billet) has a definite sphere of authority, specific task assignments and less specific "responsibilities" (such as morale, encouragement of educational pursuits, sound administration, and so on.) Billets are arranged hierarchically; that is, every officer or petty officer is under the direct supervision and control of a higher one -- in Navy fitness report parlance, "reporting senior". The entire structure is commonly referred to as the "chain of command", and includes the organizational framework and specified channels of authority and communication.

Seniority

Weber also states that the system of promotion from

III. SUMMARY

This chapter has been a review of pertinent experimental studies concerned with the application of communication processes with organizational effectiveness and behavioral variables. It has been an attempt to highlight some of the contributions made to the understanding of why communication is important to organizational health, how the influence of communication can bear importantly on the relationships among people in groups, and what communication can lend in the way of aid for problem-solving in groups.

There are many more such studies which support and elaborate on the points discussed here; however, lack of space prohibits discussing their contribution. This eclectic review is undertaken to show the reader the place of importance interpersonal communication is given in the world of scholarly research.

within a bureaucratic organization depends upon merit, seniority or both. The Navy uses a system which basically depends upon seniority, but upon merit within certain specified zones of seniority. Selection boards for officer promotion choose from seniority-eligible persons; examinations determine which eligible enlisted personnel shall be advanced to the next pay grade. Here also, "eligible" refers to those with specified time in service.

Seniority also means the extent of authority within the Navy's structure of rank and precedence. In the hierarchy, it is a system of positions which are defined by rank. In effect, each position is graded as to what rank of officer or what pay grade of enlisted person shall fill the position.

Standardization

Much of the heart of bureaucracy is its routinization and standardization. There is precedent, regulation, or a mixture of the two into some authorized decision which is followed on every new action. Nothing is left to chance; no officer ever really plays his role "by ear". It may be said that military administration has as a goal the creation of a set of formal rules and written directives which establish policy for every conceivable eventuality. Janowitz (1959) writes of an incident in World War II in which General Eisenhower confirmed the death sentence of an Army deserter. In so doing, he followed a pattern set forth in an Army Manual which prescribed each detail. The impressive feature of this act was that it was not only the first case of its kind in

World War II, but the first since the Civil War. Nevertheless, each procedural detail was painstakingly described -- down to the issuance of the "traditional" blank cartridge.

Specialization

By subdividing the task responsibility in the Navy, Weber's idea of specialization (or utilization of technical knowledge) is achieved. In the Navy, specialization is categorized by groups and even corps. Aviators, submariners, supply officers, civil engineers, physicians, nurses are all examples of the specialized officers in the Navy. In addition, the modern Navy is developing weaponry, and other sophisticated devices for warfare so that a series of sub-specialities has grown up within the past decade. For officers, sub-specialization takes effect in such fields as communications, intelligence, various types of engineering, training, personnel administration, meteorology and other categories. The pressures of advancing technology have forced sub-specialization to take on a dominant role in all naval personnel's careers. Enlisted personnel have a rating structure which is a reflection of the special tasks required in the Navy. The ratings are even further differentiated by special codes (NEC) signifying the extra skill or training the man has relative to his work.

In his precept to the 1964 selection board meeting to recommend eligible officers for promotion to the rank of commander, Secretary of the Navy Nitze stated: "It, of course, continues to be of utmost importance to select commanders

who have demonstrated outstanding performance in operational billets; however, from among those who have demonstrated this capability, we must give increasing emphasis to competence in technical and management responsibilities."

By specifying the type of officers the Navy wants to lead its forces, Secretary Nitze sums up the current philosophy of the organization he heads. Each officer is encouraged to find a sub-specialty, and perfect it in order to find maximum participative opportunity during his career. This line of reasoning flies in the face of tradition for the Navy, since it was long preached that the general line officer was supposed to pursue a varied experience career and thereby become "well-rounded". Modern technology has forced a change in this policy and the search of the selection board for officers who are primarily command potential, and sub-specialists as well indicates the extent to which the Navy has evolved.

Interpersonal Skills

With increasing complexity, further specialization and elaborate hierarchical structure, interpersonal skill is required of those who must operate within the framework provided by the Navy. In 1954 a sample of approximately 576 Army, Navy and Air Force officers on staff duty in the Pentagon were asked the question, "Generally speaking, do you feel that substantive knowledge or interpersonal skill is more important in your type of work?" The results reveal that, for officers from all three services, the higher the administrative level, the greater the emphasis on interpersonal skills. (Janowitz, 1960)

Commanding officers, charged with operational duties ranging over an entire spectrum of skills, cannot afford to neglect the technique of managing people, for it is people who will ultimately mean the difference between accomplishment of his mission and failure. Janowitz has noted that a definite shift from domination to manipulative and persuasive methods has taken place within the military establishment since the Korean War. These methods involve the relative balance of negative sanctions versus positive incentives. Domination is defined as issuing orders without explaining the goals sought or the purposes involved. (This was the spirit of the charge of the British Light Brigade.) Manipulation implies ordering and influencing human behavior by emphasizing group goals and by using indirect techniques of control. While the terms manipulation and persuasion have come to be thought of as morally reprehensible, they describe the efforts of organizational management when orders and commands are issued and the reasons for them are given. The objective of the effective military manager is not to eliminate difference in rank and authority. Instead he seeks to maximize participation in implementing decisions at all levels by taking into consideration the technical skills and interpersonal needs of all concerned. (Janowitz, 1960)

X II. INTERPERSONAL COMMUNICATION IN THE NAVY

Distribution of information to the hierarchy is the task of the interpersonal communication network in any given naval organization. The formal chain of command prescribes

the proper flow of information; from the informal organization evolves the actual communication network's pattern.

The formal communication pattern is similar to the wheel shape designed by Bavelas (see Chapter II). This pattern calls for subordinates to report to a single superior, he to another, and so on up through the chain of command. Each position in the hierarchical scale has a description of duties and explicit (sometimes implicit) directions concerning the nature, content, and direction of the communication effort which is considered necessary for the performance of the tasks of the position.

No responsible writer can devise an optimal communication system for any and all organizations. Each system is a function of the specific needs of the individual group and its tasks. The Navy, because of its formalized structure based on rank and position, has set up an intricate series of links in its interpersonal communication network. This network follows the authority and work relationships. For example, the seaman does not go directly to the commanding officer without going through the chain of command prescribed for him. This involves a series of permissions from his superiors all the way from the petty officer for whom he works, his division officer, the department head and the executive officer. The same pattern is followed by each of the individuals aboard any ship or station. The people occupying the positions in the hierarchical ladder at a particular time are the only things that change. This is an important factor in the formal network of communication, for the stability of any organization depends largely on

tion in that it permits a certain latitude in operation within the formal structure, and allows for personality variations that cannot be reflected in the formal organization.

The individual coming fresh to a naval activity wisely learns the informal communication pattern; he must, to be effective in his job. Being mostly unspecified, the rules of the informal communication channel are learned by experience and example.

Personal communication is included in the informal communication category. It is not the essential business of decision-making information being passed along the line, but such things as rumor, gossip ("scuttlebutt") and shop talk. Speed is the essential feature of any set of informal personal communication linkages; reliability is, unfortunately, not.

In order to be effective, the incumbent in any position in the hierarchy must use both levels of the communication network. It cannot be estimated the amount of informal communication necessary for the smooth functioning of any naval activity. Use of the informal channel before setting in motion the apparatus of the formal channel will serve to facilitate speed, efficiency and accomplishment of the specific task at hand.

Upward Communication

Basically, the direction of flow of communication in the Navy is three-way. It is downward in the form of policy, directives, orders and amplifying information from superiors to

how smoothly the communication net functions. If there was mass confusion and disruption of duties every time another individual was replaced, the effect would be to paralyze the organization. As it is, whenever the billet changes hands, the billet's new occupant is considered to have the same information his predecessor did -- or at least access to the source of that information.

The formal communications channel is the explicit level. At this level, one finds published organization charts, standing operating procedures, formal orders and directives, formal periodic reports, and so on. The substance of messages communicated at this level is marked as being, officially, a matter for the record. Being explicit, and having the aspect of being legalized, communications at the formal level in the Navy tend to be somewhat slow in their development and passage through a large naval activity. To the outsider, the formal aspect of the communications within a unit is the most apparent, but the importance of formal networks of communication is overshadowed by that of the informal.

The informal communication channel is the level at which activities and attitudes are much less explicit. It is characterized by the union of unattached links in the formally-oriented patterns of communication. These linkages are usually related to certain subjects or actions. The informal communication channel follows the general pattern of the overall informal organization and is the fuel which motivates it. Informal communication is a necessity to any structured organiza-

subordinates. It is horizontal in that peer position incumbents discuss information received, compare action decisions and evaluate in a coordinative or personal way. It is upward whenever feedback reaches a superior from a subordinate. This can be the formal method of reports required by regulation, or it can be an informal conversation, or an oral briefing of a senior by his staff.

The basic consideration for this paper is the flow of information from subordinate to superior in the Navy -- upward communication -- and what blocks the free flow of this information.

The Navy encourages upward communication -- not only of the formal report variety, but also the less formal, as measures of control. It is a device necessary for command to steer the proper course. The commanding officer is not omniscient; he needs feedback from his personnel on lower levels of the unit in order to evaluate his programs, his methods and himself as a manager and a leader.

The homeostatic principles of cybernetics discussed in Chapter I can be used to describe how upward communication serves as feedback for control. If a commanding officer sets a policy which is unpopular with his crew he will shortly find this out if his two-way communication network is operating effectively. Many naval officers seem to have the opinion that it is unnecessary for subordinates to like policies handed down from superiors; orders must be obeyed. Obedience to orders is not all of the story, however. Sensitivity to morale

conditions is one of the earmarks of a good leader. Unless upward communication channels of the informal variety are kept clear, the officer at the top is deprived of the feedback necessary for making any needed adjustments.

Another purpose of upward communication is to create an atmosphere of appreciation and loyalty stemming from a feeling of participation by the personnel on lower levels. Suggestion systems in industrial hierarchies are encouraged for this reason. This is not to propose that naval personnel be asked to contribute policy guidance for the Navy; only that a wise superior will be amenable to ideas from his subordinates whenever the opportunity presents itself. A recent example is Secretary of the Navy Nitze's soliciting direct correspondence on retention ideas from officers and sailors.

From upward communication it is discovered whether subordinates get the meaning from downward communication that is intended by the superior. It is highly unlikely that a subordinate left completely to his own interpretation will understand a directive or an action just as the originator intended it. In the first place, an officer, or any supervisor, may phrase the message vaguely or ambiguously. Second, the receivers of the messages may interpret even the clearest communication in the light of their own biases or experience. The only way it becomes clear as to which messages got through with which interpretation is for subordinates to relay back to superiors the interpretations and reactions to what is said and done.

With a basically authoritarian structure in the Navy, it is imperative that the views and influence of subordinates be

given airing. Operational decisions will not be decided by vote of the majority, but the very fact that the Navy places such emphasis on the authority of superiors and the unquestioning obedience to orders makes participative democracy in other matters more essential.

One particularly military form of upward communication is discussed by Janowitz (1959). This is the "oral briefing", and is considered to be part of the decision-making process and strictly military in origin. The briefing can be formal or informal; it can put a relatively junior officer in the position of influencing the decisions of his seniors. The oral briefing is a rapid and flexible means of upward communication, permitting a more or less informal exchange of information. Most briefings include a variety of questions from the senior directly to the individual responsible for details involved in the decision-making process, thereby bypassing the chain of command to a large extent. By this free flow of information, bottlenecks are avoided and the senior can be fully advised.

Janowitz (1959) further states that all organizations have hierarchical systems which impede the upward flow of communications and force reliance on informal communications. It is possible that the military requires more elaborate devices of bypassing immediately higher authorities. The question also arises whether the procedures by which subordinates control access to the "old man" are sufficiently flexible to permit an informal upward flow of communications. The tendency in all organizations is to protect the chief executive from being

unduly bothered; in the military, because of the clear-cut features of rank and hierarchy, informal access to higher-ups can be greatly reduced.

The Navy has another avenue of upward communication which is a way personnel may appeal directly to the commanding officer if they have a grievance. This is known as the "Request Mast" for enlisted men and involves the right to be heard by the commanding officer. The procedure is guaranteed by the U.S. Navy Regulations: "The right of any person in the naval service to communicate with the commanding officer at a proper time and place is not to be denied or restricted."

The Request Mast is used as a resort by men who feel that the commanding officer is not receiving a full report from his staff officers concerning a situation involving one man or even a group of men. By so instituting this form of hearing, the military ensures a formal channel accessible to all and any within the hierarchy. Officer personnel have the same right, of course: mast proceedings are not used.

III. BARRIERS TO UPWARD COMMUNICATION

Just as interference in the transmittal of a message in a mechanical communication device produces "noise" in the system, so also is interpersonal communication beset with noise. Several causes of noise are evident in the communication process. Some are underlying and fundamental to the entire network within an organization; some are pertinent to specific linkages in the network. This section will be devoted to the discussion of those barriers which are specifically (but not exclusively) oriented to impeding the upward flow of information within the Navy.

Basically the Navy has provided adequate organizational channels for communication both up and down. In fact, Bavelas' experiment and Leavitt's studies of communication nets showed that more efficient communication exists in hierarchical organizations than under laissez-faire conditions (see Chapter II). Structure in an organization seems to help the flow of information, but barriers do exist even where communication nets are most adequate. These barriers may be classified roughly in two categories: those resulting from organizational situations, and those imposed by the interpersonal relationships, personalities and attitudes of the individuals involved in the communication process.

Organizational Barriers

The nature, dynamics, and functions of an individual command's organization may be an important barrier to the effective or efficient communication of information. Often the effect of the organization on the members produces barriers. Most relevant to this paper are the following types of organizational barriers.

Military restraint. Many times in a military organization the directing of upward communication of a critical nature is considered inappropriate. The natural hesitancy to criticize the boss is accentuated in the Navy because of the emphasis on rank and authority. For instance, in recruit training as well as officer candidate training, the individuals are "homogenized". This process affects behavior, sentiments, and for the time being, status. The newcomer to the Navy is meant to feel reduced to a level where he is equal to his classmates, but to no one else. Tradition demands that he be inculcated with the respect (even

awe) for the rate/rank structure in the Navy, and that the sanctity of the system is never to be questioned. To be sure, the indoctrination period dwells heavily on traditions, custom, precedence, rank and general orientation. But this is because the individual is making a tremendous leap from the fairly unstructured life of a civilian student (usually) to the highly structured environment of the Navy.

Once out of the sheltered life of the indoctrination period, the Navy expects and enjoins each member to make his way up the ladder as rapidly as possible. It is not unusual, however, for the effect of the indoctrination to remain with the newcomer for some time and even mold his thinking and actions for the duration of his stay in the Navy. Some natural resistance is bound to be encountered by any officer expecting an open channel of upward communication in a group of newly-arrived seaman apprentices or ensigns. The writer has heard it expressed many times that the greatest shock to the new enlisted man is the transition from "boot camp" to his first duty station. It is largely because of this different emphasis that this is true. To some naval personnel, "gold braid" continues to frighten and be a source of anxiety for their entire military career. To feel free to express oneself in such an environment would be unusual.

Power and status relationships. The superior-subordinate relationship has a direct effect on the flow of communication within the hierarchy of any organization. Numerous studies have shown that the subordinate tends to filter out of his communication with his boss all information which would serve to make the boss look

bad. Even neutral information is distorted so that it appears as good news to the superior. Information filtering is done (Planty and Machaver, 1960) both wittingly and unwittingly.

Cohen's (1958) study of upward communication in hierarchies concluded that when rank is defined in terms of power or control over need satisfaction as well as general status, those with low rank who can move upward communicate in a way guaranteed to protect and enhance their relations with the highs who exercise that control. Whereas those with low rank in the organization for whom mobility seems impossible "have less need to communicate...in a friendly, promotive...way."

Power, as expressed in the rank structure of the Navy, would be perceived as control by juniors of their seniors. The research seems to indicate that perceived power is the key to this attitude of willing upward communication for those in a position to move up in the chain of command. This would apply to officers who may be trying to "impress" the commanding officer or any superior. Whereas this would not appear to be true for enlisted personnel who do not have upward mobility aspirations and who, in the terms of Cohen's study, do not need to communicate to the upper (officer) echelons. It is more common to find that enlisted men have a more willing attitude to communicate to senior enlisted, such as chief petty officers. Since the encouragement of upward communication from all levels of the command is desirable and necessary, it would appear that skillful officers will depend on this top layer of enlisted personnel for communication support.

Likewise, it should be noted that the eager communicator may be passing on irrelevant or faulty information simply at

the urging of the need to communicate. Kelley (1951) states that irrelevant content to communication is postulated to serve the function of permitting the occupant of an undesirable position to escape from it. It may also be that communication serves as a substitute for real locomotion to low-status people who exhibit some desire to move up.

Another barrier in the organization is related to the hierarchical position of an individual who becomes a "power center". The power may be personal, but the position in the organization is the manner in which it is acquired. It may be legitimate as with the administrative officer or executive officer of a command. Power involves the ability to influence someone to make decisions in a certain way or even behave in a special way. Someone who has been around the command such a long time that he is the only one who "knows the ropes" is an example of this type of power. Many times "ownership of information" is encountered in this situation of power. The individual uses communication as a weapon. March and Simon (1958) say the communication of an organization enters at specified points. Here information is screened by an individual and passed on in the perceptual terms of that person. What passes on in the network very often is the judgment of the filtering individual, and not the facts. This could be a severe barrier to the passing of communication up to the commanding officer in the typical Navy unit if power centers are not controlled.

Mechanical. The final organizational barrier to upward communication is the lack of any mechanical means for getting subordinates' views, opinions, reactions and so on. In the Navy this problem can be too easily ignored since the organization channels

provide adequate access. However, they are only adequate if publicized by the command and individuals are encouraged to use them. Such means as rumor clinics, a question-and-answer section to the Plan-of-the-Day, and adequate person-to-person interviews at fitness report and enlisted evaluation periods can all be utilized for the mechanics of getting the word from below to the chief executive.

Interpersonal Barriers

While the barriers just discussed are in a sense interpersonal barriers to upward communication, they arise from the nature, dynamics and functions of the organization itself. There are, however, additional barriers which come from interpersonal contacts and influences outside any obvious context of the organization.

Evaluation tendencies. Carl Rogers (1952) considers the major barrier to mutual interpersonal communication to be the natural tendency to judge, to evaluate, to approve (or disapprove) the statement of the other person or the other group. In any communication situation where there is an emotional response involved, the climate is not one which will breed accurate perception. For example, in the area of upward communication, let us say that a seaman expresses dissatisfaction with some duty he may have. If his division officer interprets this as being the typical "gripe" of a malcontent, he may be thwarting some very valuable information concerning attitude, morale, or other real problems in the command. In this situation, the division officer is discounting

the ability of the seaman to be the judge of anything, much less a matter which might concern change for improvement. His evaluation, therefore, becomes a block which impedes upward communication.

Perception. People's perceptions are determined by their needs. Children from poorer homes, when asked to draw a picture of a quarter, draw a bigger than actual one. Personnel, when asked to describe the people they work with, talk about their bosses more than about their fellow workers. This is true because (Leavitt, 1964) their bosses are more important to their needs. A seaman magnifies a compliment from the commanding officer, or even his chief; but he also magnifies a word of disapproval.

Selective perception can exist to a large extent in the process of interpersonal communication. Selective perception is described by Leavitt as the process of picking out the pleasant or filtering the unpleasant. For example, one may find it easier (Leavitt, 1964) to wake up to go fishing than to keep a dentist's appointment. Being unaware of perceptual differences can create a severe barrier to upward communication. The commanding officer who views a remark made by a junior officer as critical may find that the junior meant to say something entirely different. (See Chapter II regarding Loomis' study.)

It has been said that the communication process involves sending and receiving of messages. It should be remembered, however, that encoding and decoding occur at either end of the circuit and that receiving an accurate message depends wholly on the functioning of these processes plus noise interference. In the interpersonal communication process, a similar procedure is

found. The communicator (sender or transmitter) first forms the message in his thoughts, next searches for the words which will properly express the thought he means to convey. The succeeding step is to transmit the message in this code (words). The receiver hears the words, and decodes them for meaning. The final action is the feedback to the transmitter in the form of a facial expression, answer or gesture which indicates what was actually perceived to be the message by the receiver.

Interpersonal trust. Read's studies of upward communication (see Chapter II) pointed out the importance of interpersonal trust in the relationship between subordinate and superior. If a subordinate trusts his superior, it will act as a modifying influence in the communication of unpleasant or unwelcome information to the superior. Low trust of a superior strengthens the tendency of particularly ambitious subordinates to withhold or (Read, 1962) in some way to prevent accurate upward communication.

This points out a barrier to upward communication in the Navy. If a person in any supervisory role in a naval activity acts in an unpredictable or arbitrary way when subordinates pass on bad news, the trust of the superior by the subordinates will be lowered. If an individual feels that all he will receive for his efforts is a severe reprimand, or a tirade, he will be inclined to withhold information which is likely to produce this behavior. If a superior cannot tolerate any criticism, he will not hear criticism because his own behavior threatens his subordinates.

Listener's attitude. A negative attitude toward the communicator, or toward the content of the message will likely

cause the intended receiver to misunderstand, or perhaps to ignore, the message. Also, the attitude of the receiver toward himself is another measure of how accurately he will be able to understand the information given to him.

Disinterest, dislike, suspicion, all cast a barrier in the way to fruitful upward communication. When a junior is communicating with his senior, if the senior does not agree with the junior's views, he may reject these views. This causes a disruption in the communication process at that point and the listener may not "hear" another word.

Poor listening habits. When upward communication is initiated at the lower levels of the hierarchy, it must pass through several levels to reach the chief executive. Many barriers stand in its way; one of the most common is that of poor listening. Nichols and Stevens cite three major reasons as to why poor listening contributes to the failure of upward communication:

1. Without good listeners, people do not talk freely; therefore the flow of communication upward is seldom set into motion.
2. However, if the flow should start, only one bad listener is needed to stop the movement toward the top.
3. Even if the flow should continue to the top, the messages are likely to be badly distorted along the way.

(Nichols and Stevens, 1957, p. 150)

Listening, with understanding, opens communication channels. It increases the subordinate's self-respect because he is respected by the superior. By the superior respecting the subordinate enough to listen to him and make sure that he realizes this, the respect for the superior by the subordinate grows. Thus understanding is more likely to occur and influence by the

subordinate is gained. Even if the content of the conversation is rejected by the superior, the buildup of respect and trust is aided by sympathetic listening and further and future communication is encouraged.

Cultural and language barriers. In a study of the effects of social class on communication, Schatzman and Strauss (1955) found that differences in modes of communication are more than differences in intelligibility, grammar and vocabulary. Differences are found in the number and kinds of perspective, ability to take the listener's role, use of classifying or generalizing terms and devices of style to order and implement communication. These findings indicate that it is incumbent on the class group with the more highly developed communication abilities to display greater understanding, more patience and skill in problems of upward communication with members of any group with less developed abilities.

In the Navy, as a broad generalization, the officer group could be equated to the higher social class and the enlisted group to the lower. Advantages of education and social advantage, as well as status and endowed power for most officer personnel tend to support this.

It is obvious that if an enlisted man does not understand the words or ideas of his officers, he will feel a deep chasm of psychological distance between himself and them. Consequently with a feeling of distance it will become increasingly difficult for him to want to communicate with them. Officers, quite unwittingly, use sophisticated words and phrases which confuse and dismay the lower-rated enlisted man. In a defensive way, the man will

withdraw and become silent -- often in resentment.

IV. ELIMINATION OF BARRIERS AND STIMULATION OF UPWARD COMMUNICATION

Essential in the two-way communication process is the discovery and removal of barriers which impede the flow of upward communication. In the preceding section, the discussion has been centered around what barriers were and how they came to be barriers. This section will deal with the elimination of the barriers and stimulation of effective upward communication.

First and foremost, the naval leader -- whether officer or petty officer -- must be persuaded of the value of upward communication and make an effort to learn at what points in the organization to expect it. They must include in their thinking about leadership and morale within a naval activity the idea of upward communication being a tool which is essential for control purposes.

The commanding officer should be aware of potential trouble spots in his organization with respect to communication barriers between him and his men. He must provide the means whereby the men of his command can express themselves in less formal environments than the work situation. Ships and stations can use the methods of all-hands picnics, sporting events or other social activities as vehicles for the stimulation of informal upward communication. If the officers of a command attend these activities and participate, the possibility of a more democratic atmosphere can be realized. Enlisted personnel, especially, are impressed by an officer who proves by such informality that he is "human".

Another avenue to improved upward communication lies in the use of supervisory personnel who have proved to be especially adept at listening to lower-rated personnel. These individuals -- often the indigenous leaders of a group -- distinguished by the trust they have engendered in their subordinates, can be used as listening posts by the executive or even the commanding officer. Frequent informal sessions with these personnel can complete the information flow to the very top for evaluation. Short circuits down the line can be minimized. It is important to note, however, that extreme caution should be employed in using such a device. The individuals who are chosen must not be able to use this as a power device. Neither must they feel that they are being asked to act as "squealers" -- an interpretation many enlisted personnel may make.

Senior officers in any command can urge their juniors to develop a line of communication which will keep them advised of the organization's morale status. Good listening habits, "open-door policies", adequate counseling and nondirective interviewing techniques can be pointed out as modes of encouragement to communication. Froman, writing in Nation's Business (October, 1961), says that most businessmen spend seven out of ten working hours in giving or getting information. Of this, listening takes 45% of their time.

Rumors, or as they are known in the Navy -- "scuttlebutt" -- should never be ignored. They are a symptom of malfunctioning communication channels. If they are handled in the beginning, they will be prevented from growing into serious morale hazards.

Rumor clinics can be utilized at naval installations with great success if properly instituted. Any rumor or question can be submitted to a central box. The question must be answered promptly and adequately by the officer in the command responsible for the function about which the question is asked. This includes the executive officer and the commanding officer, if need be. The Plan-of-the-Day, station newspaper or special bulletin board can be used as the means for promulgating the answers.

Finally, the attitude of the commanding officer must be one of receptivity to communication. If his position on the importance of communication is made known to the entire organization, his example will do much to lead others to adopt the same attitude. No weakening of discipline is necessary to pursue a vigorous campaign for the improvement of two-way communication.

V. SUMMARY

In this chapter, the interpersonal communication in the Navy has been explored. The emphasis on upward communication as the second partner in the two-way communication process is based on the theory that it is the more neglected of the two. The barriers to upward communication, mainly those attributed to organizational functions and those of human behavior, have been discussed. Information gained by the chief executive of the activity from his subordinates can be used as a control factor (feedback); barriers which interfere with the transmission of such information should and can be eliminated.

CHAPTER IV

SUMMARY AND CONCLUSIONS

In this final chapter, a brief summation of the gist of the study will be given. In addition, suggestions for future research which have arisen as a result of findings in this paper will be set forth. How the study may be used by naval officers and petty officers to enhance their communication skills and the importance of upward communication to them as leaders will be discussed.

I. SUMMARY OF THE STUDY

This paper has been written for the express purpose of bringing together in one place the aspects of interpersonal communication which could apply to organizational units of the Navy. The problem outlined in Chapter I has been explored through research of experiments and studies conducted in the subject of communication at all levels. The theoretical background of communication in the fields of information theory, cybernetics, semantics, and organization theory have been reviewed to show their importance. Any study of a communication network necessarily involves some of these allied disciplines.

Studies made by scholars on interpersonal communications range from the network concepts which operate in any organization to the qualities of personality and character which facilitate communication. These studies reflect the progress of knowledge about communication as a function of groups of people. By applying the concepts explored in these studies to the individual organizational unit, facilitation of communication can be accomplished.

Upward communication especially, indicates the health of the morale and participation of a group. In the final analysis it is the chief executive of the organization who must decide and define the patterns for upward communication. He must recognize what barriers can exist and then specifically which barriers are affecting his unit's network. He must realize that he is dependent on sources of information from below, even when that information may be damaging to his ego, or contradict his own prejudices. In the Navy, it is imperative that the two-way communication process be kept lively and efficient. This paper has pointed out some of the pitfalls and shown some of the ways out.

II. RECOMMENDATIONS FOR FURTHER RESEARCH

In reading references for the preparation of this paper, the writer was able to locate no study of interpersonal communication in the military situation. The present attempt to draw together significant information and parallel situations in the Navy is not to be construed as the only way of coping with communication problems.

It would be a significant piece of research to study the new patterns of communication emerging today in the bureaucratic structure of the Navy. Perhaps there is more importance to the objectives of the military in the modern world and the corresponding forms of interpersonal communication than have been discussed here. For example, all hierarchies are not the same, motive-wise. Do non-profit hierarchies react in the same way as their opposite numbers in the profit-seeking community?

Another aspect would be the specialization which is being

more intensely cultivated in the Navy in this decade. Specialization may bring about consequent changes in the structure of the Navy's organization. Perhaps upward communication will be enhanced by the weakening of the traditional structured approaches to every situation. This is mere speculation; scientific experimentation might shed light.

The effects of poor upward communication in the Navy's organization would be another research topic tying in the leadership concept with social skills. To speak about poor communication is not as effective as showing empirical evidence of cause-and-effect relationships.

III. IMPLICATIONS FOR THE USE OF THE STUDY

The Navy has implemented a massive leadership program in order to emphasize the importance of personal attention to command and control in naval units. The skillful leader will use interpersonal communication as a tool for leadership. In an authoritarian organization, such as the military, communication often comes close to the one-way, superior-subordinate relationship only. To cite Janowitz (1959), the manipulative, persuasive spirit of the modern military organization is more in keeping with a democratic society. Buildup of interpersonal trust, sympathetic cooperation and feelings of participation and loyalty for a unit are better indices of command readiness than blind obedience.

Related to the growing concern for leadership in the Navy, there should be the same emphasis on the methods which indirectly affect the conditions under which good leadership is found. Communication skills, which are not taught in an explicit way

in the Navy, must be recognized as a way in which conflict and frustration can be alleviated. Too many naval officers blame "the system" when personnel become disheartened and morale sinks dangerously low. Far better to explore the causes of bad morale and root them out. Any leader with an effective two-way communication network in his organization will find this exploring process easier.

It is not enough to simply state that all naval officers are managers. Management techniques must be taught and their value has to be appreciated. The present-day naval officer is in some ways like a corporation executive; he is bound by the same principles of all organization leaders. He must be not only a technical and combat expert, he must practice persuasion, diplomacy, and negotiation.

On the other hand, he can never forget that the purposes of his organization are very different from those of the business man. The blending of the social-skilled manager and technically-trained naval officer is a delicate process - sometimes taking an entire career to perfect. Nevertheless, it is the challenge of today's Navy.

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